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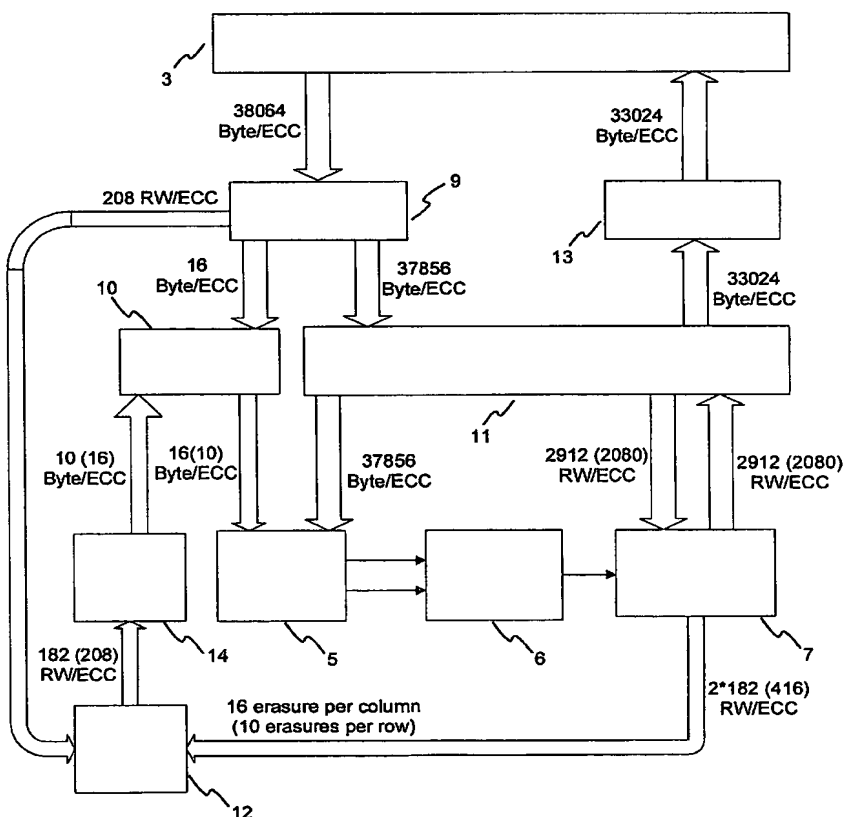
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(54) Title: **ERROR CORRECTION METHOD FOR REED-SOLOMON PRODUCT CODE**



(57) Abstract: The present invention relates to soft-decision decoding of Reed-Solomon product codes. According to the invention, a method for error correction of an encoded data stream comprises the steps of: - saving the demodulated data stream in an input buffer 2; - performing a first correction process on-the-fly in the input buffer 2; - transferring the data to an external SDRAM 3 after correction; - copying a data frame from the external SDRAM 3 to an embedded SRAM 11; - starting a multipass correction in the embedded SRAM 11; and - copying the corrected data frame back from the embedded SRAM 11 to the external SDRAM 3.

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